Learning Objectives: LAPAROSCOPIC OVARIAN CYSTECTOMY

Provider #/name:_________________________________________________ Date:
Training site: ______________________________________________________   Grader:

Training level: (circle one)  PGY-1   PGY-2   PGY-3   PGY-4  Fellow   Staff

Level 1 (Declarative Knowledge)

1. The learner should be able to understand the appropriate patient selection for laparoscopic ovarian cystectomy.
   - Ultrasound criteria not suggestive of malignancy
   - Size amenable to surgeon’s skill set for laparoscopic management

2. The learner should be able to list in a verbal or written mode major benign ovarian cysts that can be managed by cystectomy.
   - dermoid
   - serous or mucinous cystadenoma
   - symptomatic hemorrhagic ovarian cyst
   - ovarian torsion (release the torsion and remove the cyst)
   - endometrioma
   - persistent simple cyst

3. The learner should understand that drainage/fenestration of the ovarian cysts (other than follicular cyst) is associated with a high recurrence rate

4. The learner should be familiar with the qualifications for, as well as relative and absolute contraindications for conservative laparoscopic management of ovarian cysts
   • Qualifications:
     - Hemodynamically stable patient
     - Patient able to tolerate adequate Trendelenburg position
     - Proper equipment available
     - Adequate surgical skills possessed by the surgeon
   • Contraindications:
     - concern for malignancy (ascites, abnormal CA125, ultrasound suggestive of malignancy)

5. The learner should describe or identify in a verbal or written mode major anatomic landmarks of the pelvis and specific anatomy of the ovary
   • Location = ovarian fossa
     - Bounded by: external iliac vessels, obliterated umbilical artery, ureter
   • Mesovarium
     - Posterior portion of broad ligament
- Supports ovary
- Blood supply of ovary
  - Suspensory ligament of the ovary = Infundibular Pelvic Ligament
    - Attaches ovary to the pelvic side wall
    - Contains the arterial, venous and nerve supply to the ovary
  - Uterovarian ligament
  - Blood supply
    - Arterial = descending aorta
    - Venous
      - Left – drains into the left renal vein
      - Right – drains directly into the inferior vena cava
  - Hilum
    - Entrance of blood and nerve supply to the ovary
    - Arcuate formed by branch of the ovarian and tubal branch of the uterine arteries
  - Nerve supply
    - Ovarian, hypogastric and aortic plexus

6. The learner should be able to in a verbal, written or demonstration mode identify, 
assembly, and the use of all equipment necessary for LSC ovarian cystectomy
- laparoscopic trocars
- Veress needle (optional)
- laparoscope
- laparoscopic camera head
- light cord
- CO2 tubing
- Laparoscopic tower equipment
- Monopolar or bipolar needle, LSC scissors, Harmonic scalpel or hook
- Suction irrigator
- Laparoscopic grasper
- Laparoscopic specimen bag
- Laparoscopic graspers: Allis, atraumatic

7. The learner must in a verbal, written or demonstrative mode identify the number, size and locations of incisions for port placement to facilitate performing LSC ovarian cystectomy
- intraumbilical (5 or 10 mm)
- minimum of two accessory ports (5 or 10 mm) placed properly in the lower lateral quadrants, suprapubic position and/or lateral upper abdominal position
- additional ports as needed
Level 2 (Simulated and Clinical Performance)
(Specific Task: LSC ovarian cystectomy)

8. Prepare and position the patient for laparoscopy
9. Describe or place uterine manipulator/sponge stick
10. Able to assemble camera, suction tubing and energy sources/instruments
11. Describe or perform gaining initial access to abdominal cavity and create appropriate pneumoperitoneum
   a. Veress needle
   b. Direct trocar insertion (blind or visual)
   c. Open (Hasson)
12. Visually inspect the pelvis and upper abdomen to survey anatomy
13. Demonstrate proficiency maneuvering laparoscope
14. Describe or demonstrate secondary trocar placement to avoid complications and maintain sufficient spacing for full range of motion, including proper trocar diameters
15. Demonstrate collection of pelvic washings (optional)
16. Identify the abnormal ovary
17. Evaluate the opposite ovary
18. Grasp, position, and orient the ovary with care to avoid rupturing the ovarian cyst.
19. Incising the ovarian serosa at the antihilum aspect of the ovary without damaging the ovarian cyst.
   -monopolar
   -scissors
   -harmonic
20. Grasp both sides of the ovarian serosa to provide stability and visualization of the underlying ovarian cyst.
21. Demonstrate understanding of adequate ovarian serosal incision to avoid undue traction of the ovarian cyst to prevent rupture.
22. Remove the cyst from the overlying serosa with sharp and blunt techniques minimizing traction of the ovarian cyst.
23. Retrieve the entire specimen and place this in a specimen retrieval pouch
24. Confirm hemostasis by lowering intraabdominal pressure.
25. Judicious use of cautery to achieve hemostasis
26. Irrigate and remove blood and fluid by suction
27. Wrap ovary with intercede.
28. Close appropriate fascial defects after trocar removal (> 5 mm)
29. Properly remove all remaining trocars
30. Properly close skin incisions